

552,345

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
23 September 2004 (23.09.2004)

PCT

(10) International Publication Number
WO 2004/080911 A1

(51) International Patent Classification⁷: C04B 28/00, 7/26

(74) Agent: SISSON, Thomas, E.; Jackson Walker L.L.P., Suite 2100, 112 E. Pecan St., San Antonio, TX 78205 (US).

(21) International Application Number:

PCT/US2004/007247

(22) International Filing Date: 10 March 2004 (10.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/453,231 10 March 2003 (10.03.2003) US

(71) Applicant (for all designated States except US): FLOW-ABLE FILL, LTD. [US/US]; 4806 Avenue C, Corpus Christi, TX 78410 (US).

(71) Applicants and

(72) Inventors: SETLIFF, Jerry [US/US]; 4806 Avenue C, Corpus Christi, TX 78410 (US). TIMMONS, Scott, F. [US/US]; 371 County Road 387, San Antonio, TX 78253 (US). PIKE, Clinton, W. [US/US]; 243 Marbel Avenue, Baytown, TX 77526 (US).

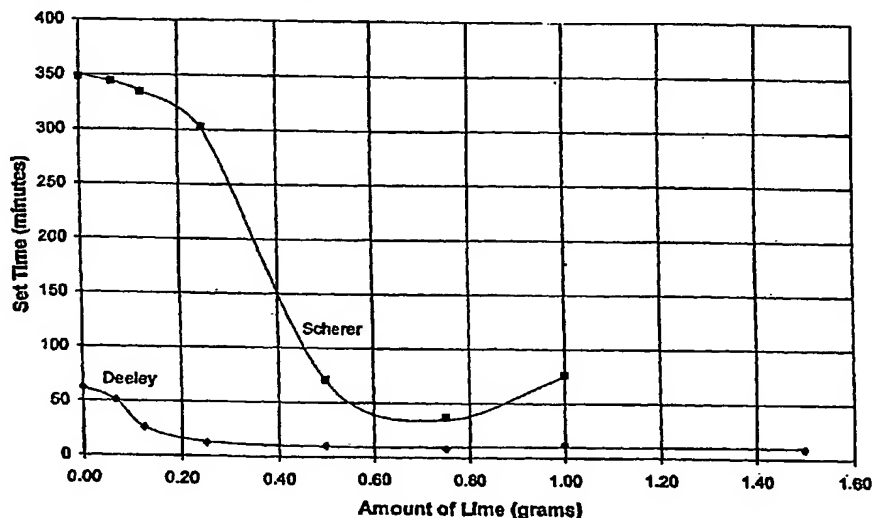
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: CONTROLLED LOW STRENGTH FLOWABLE FILL COMPOSITION WITH IRON CHELATING COMPOUNDS

Effect of Set Time of Class C Mortars with Lime



(57) Abstract: A rapid setting, controlled low strength composition of Class C fly ash is provided having a quantity of hydrated lime and an iron chelating compound in an amount sufficient to accelerate the hydration and set time of the fly ash. In some examples, a filler material is added. A method for acceleration of the hydration and set time of a cementitious mixture is provided wherein hydrated lime is added to the cementitious mixture in an amount in the range of 0.1 % to 15% by weight and an iron chelating compound in an amount in the range of 0.01% to 5.0% by weight of the cementitious material. Further, a calcium source and an iron chelating compound may be added to a Class C fly ash to accelerate the hydration and set time of the ash.

WO 2004/080911 A1



Declaration under Rule 4.17:

- *of inventorship (Rule 4.17(iv)) for US only*

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.